

Appl. No. 10/671,359
Amdt. dated August 24, 2007
Reply to Office action of June 29, 2007

REMARKS/ARGUMENTS

In regard to the Examiner's Office Action of 29 June 2007, Applicant is herein presenting his considerations and response to the Examiner's comments.

Referring to the objections on prior claims 12, 14, 19 under section 35 USC 101, Applicant has canceled all remaining claims and has now provided new claims 21, 22, 23, 24, 25 which correlate respectively to prior claims 1, 5, 7, 9, 12. Applicant therefore would indicate that the objections under section 35 USC 101 are no longer relevant.

Moreover, with regard to each of the remaining independent claims, namely claims 21 and 23, Applicant has amended the claims to more clearly define the subject matter of the claimed invention. Applicant submits that the present claims are now in suitable order and that all formal objections have been disposed of.

Turning to the substantive objections taken to the claims, Examiner contends that prior claims 2, 3, 6, 7, 8, 14, 15 and 19 are anticipated by Krychniak (US Patent 6,192,357). Applicant would now traverse this contention. Of the claims objected to by the Examiner, only prior Claim 7 remains (as new claim 23), and includes the additional feature steps of determining an average read/write ratio, a critical read/write ratio, comparing the ratios, and only then performing the invoking of a means for providing an additional table in the database.

As Krychniak reference is wholly silent on the use of read/write ratios to determine whether to provide an additional table, Applicant submits that the objection for anticipation under section 35 USC 102 is now inapplicable.

Referring now to the objection for obviousness under section 35 USC 103, Applicant wishes to point out that the additional amendments made to the prior independent claims 1, 7, will more clearly define the invention as they now appear as claims 21, 23.

In particular, Examiner's attention is drawn to an earlier amendment which may have provided insufficient clarification. Applicant's detailed description and prior claim set speak of the determination of a critical read/write ratio which is utilized to determine whether modification should be made to a database.

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The critical read/write ratio, as explained generally in Applicant's specification at page 14, lines 10-25, provides Applicant with a numerical "benchmark" against which to determine whether an embodiment of the invention would result in a performance increase when applied to a particular database.

In more detail, the critical read/write ratio provides an abstracted measure of the level of nesting of entities in a database, in a manner which allows the ratio to be compared to real world statistics about the actual usage of the database. That is, the critical read/write ratio is not an arbitrary number chosen by a user or administrator for test purposes, (as in Prabhakaran) but is a derivable quantity which is unique for each database.

In other words, Applicant does not propose utilizing an arbitrarily chosen "read to write ratio" to test the performance of a database. Rather, Applicant proposes the measurement of the average read/write times for two different implementations of a database, to thereby determine a parameter which Applicant has termed the "critical read/write ratio". The critical read/write ratio is used (in conjunction with other information) to determine whether performance gains will result if a user switches from a first implementation of a database to a second implementation of a database.

Examiner is referred to the Prabhakaran reference U.S. 6,859,758 B1 at column 5, lines 49-65. Prabhakaran teaches:

"... a desired read to write ratio for operations to a database storage system is assigned. Preferably, this ratio may be set by a user operating a testing process. ... At least three ratio values may be of interest in understanding the performance of the database storage system. Additionally, a read to write ratio approximating a desired set of real applications should also be used in order to simulate an actual use of the database storage system." (emphasis added)

As can be seen by section referred to by Examiner, Prabhakaran teaches the use of an arbitrarily (whether deliberately or randomly) chosen read to write ratio to "test" the performance of a database.

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The three underlined sections of Prabhakaran above clearly outline the teaching of Prabhakaran as indicated below::

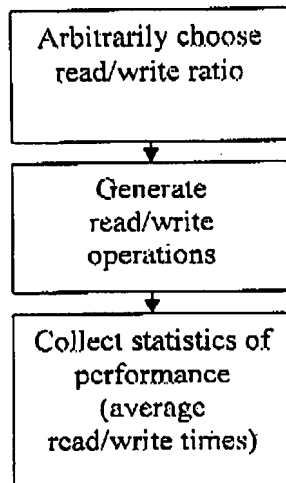
1. Prabhakaran teaches "assigning" (i.e. choosing) a desired read/write ratio. At no time does Applicant's invention contemplate a user "assigning" a critical read/write ratio. The critical read/write ratio is a quantity derived from testing two implementations of a database to arrive at the ratio.
2. Prabhakaran teaches that the ratio "may be set by a user". At no point can a user, when utilizing Applicant's claimed invention, "assign" (or vary) a critical read/write ratio, as the critical read/write ratio is not an arbitrary number.
3. Prabhakaran suggests using a read to write ratio "approximating a desired set of real applications". Once again, Applicant points out that Applicant's invention provides no possibility for assigning, choosing or otherwise varying the critical read/write ratio. The critical read/write ratio is an inherent, measurable property of the in situ database.

Applicant's critical read/write ratio is a function of the internal structure of the database (i.e. it will not vary unless the structure of the database is altered), it is not a function of the actual reads/writes performed during testing or usage of the database which is manipulable by a user.

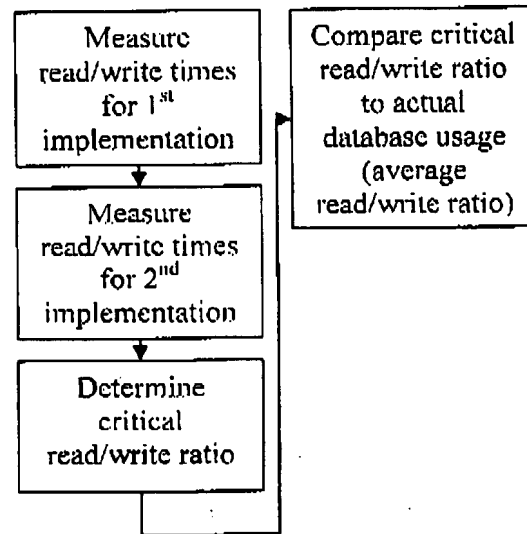
The difference between Prabhakaran and Applicant's claimed invention is best illustrated by two comparison flow charts:

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Prabhakaran:



Applicant's claimed invention:



As can be seen from the two flowcharts above, Prabhakaran cannot be used to implement Applicant's invention, because Applicant's invention does not contemplate the step of "choosing", allocating, varying or otherwise ascribing an arbitrary read/write ratio to a database for testing purposes, but rather, is concerned with the determination of a read/write ratio, a property which is inherent and dependent on the structure of the database.

Examiner is referred to Applicant's specification at page 14, line 26, through to page 15, line 15 of Applicant's detailed description, which explains in more detail the manner in which the critical read/write ratio is determined.

Therefore, a person skilled in the art, faced with the system of Prabhakaran, would not consider determining a read/write ratio by probing the structure of two different databases. as there is no requirement in Prabhakaran to determine a read/write ratio which is derived by testing two different implementations of an in situ database (as provided by Applicant).

Furthermore, Examiner also contends the Column 6, lines 44-47 of Prabhakaran discloses the feature of performing the method steps of Applicant's invention (as defined in Applicant's

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new claim 2) which now incorporates prior claims 1 and 4), if the initial read/write ratio is greater than a critical read/write ratio. This contention of the Examiner is certainly not the reality in Prabhakaran.

Again, Applicant would indicate that no such feature is disclosed by Prabhakaran. Column 6, lines 44-47 of Prabhakaran states "By having a strong correlation between the stress test and production environments, the test results would be highly indicative of the production behavior of the database storage system".

It is not seen how this feature could read or teach onto Applicant's claimed feature.

The Examiner has indicated that he equates Applicant's read/write ratio to Prabhakaran's "desired ratio" in the first step 310 of his Fig. 3. Once again, Applicant points out that the "desired ratio" is the "desire" of the user, not a ratio that reflects an inherent property of the database. There is no basis for Examiner to "equate" Prabhakaran's situation to that of Applicant.

Therefore, Applicant emphasizes his position that the disclosure of Prabhakaran does NOT teach nor read upon Applicant's claimed invention.

Thus Applicant requests the Examiner to review Applicant's claims as a whole in their entirety and consequently provide a timely Notice of Allowance therefor.

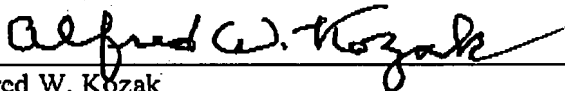
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Respectfully submitted,

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Dated August 24, 2007

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